
Central Valley Regional Water Quality Control Board

14 June 2013

Parry Klassen, Executive Director
East San Joaquin Water Quality Coalition (Coalition)
1201 L Street
Modesto, CA 95354

Dear Mr. Klassen,

Thank you for your 11 April 2013 submittal of templates associated with the Waste Discharge Requirements General Order R5-2012-0116 for Growers within the Eastern San Joaquin River Watershed (Order). Your timely submittal is in accordance with the "Group Option" for template development identified in provisions VIII.C1.a., C.2.a., and C.3.a. of the Order.

Central Valley Water Board staff appreciate the effort that the Coalition and the other agricultural representatives have put into developing the templates. We believe that the draft templates you submitted represent an important first step in developing the tools growers will need to comply with the Order. However, prior to making the templates available for public comment, we would like to work with the Coalition and agricultural representatives to ensure the templates will result in collection of information: 1) required to comply with the Order; 2) that can be used to determine whether grower practices are meeting the Order's water quality protection requirements; and 3) that is of high quality.

Our comments (see following pages) address both issues that apply generally to the templates, as well as comments associated with specific templates. Board staff will contact you to set up a meeting to discuss our comments and your time line for addressing them. In the meantime, please feel free to contact me at jkarkoski@waterboards.ca.gov or (916) 464-4668.

Sincerely,

Original Signed by

Joe Karkoski, Program Manager
Irrigated Lands Regulatory Program

General Comments on Templates

1. **Instructions to Growers** – the supplemental information you provided was very helpful in explaining how you believe the templates comply with the requirements. However, a key piece of the template will be the instructions to the grower on how to fill out the template form. The instructions will be important to ensure the grower knows what is required; that the information being provided on the form is done in a consistent manner; and the information is of high quality. Your next submittal must include the instructions for filling out the form or provide the timeline for developing the instructions.
2. **Certification Statement** - the templates are either used to convey information to the third-party or will serve as a plan that is kept on site and must be produced as described in the Order. The templates, therefore, must include the certification statement in section IX.3. of the Order. As part of the certification, a data field that indicates the date the template was completed and who completed it must also be included. In addition, the nitrogen management plan must be certified for high vulnerability areas and the sediment and erosion control plan must be certified. The templates must include a place in the form for the party certifying the plan to sign.
3. **Linking Practices with Location** – currently, it is not clear how the practices are going to be linked to a location. This linkage is especially critical where a grower has multiple parcels, potentially with multiple crops. Without linking the practices to a given crop and a given parcel (or field), it is not clear how the Coalition would be able to relate water quality monitoring results to practice implementation. The Order currently requires reporting from the third-party to the board on a township basis, however, the Coalition will need the practice information at a finer scale to conduct its analysis. Also, if requested, those data must be provided to the board as part of an inspection or upon written request from the Executive Officer. The templates must be modified to ensure the data collected can be associated with the appropriate location.
4. **Common Data Fields between Templates** – the templates appear to have different data fields for basic information that should be common for a given farm. To save the grower time in entering such information multiple times and to avoid possible misunderstanding, the templates should have certain basic information / data fields in common. The Farm Evaluation has name (it is not clear whose name); Coalition Member ID#; parcels; and total acres. The Nitrogen Management Plan adds Field # and has a data field called "Owner/manager". The Sediment and Erosion Control Plan has more specific information including, both the name of the owner and operator, as well as address and contact information, but does not include the Member ID number. The templates should be modified to have common information in each of the templates regarding the farm.
5. **Electronic Templates** – the Coalition and cooperating agricultural groups have provided hard-copy versions of the templates. Any electronic version of the templates must be consistent with the hard-copy version approved by the Executive Officer. Board staff strongly encourage the Coalition to develop electronic templates, and, to the extent feasible, eliminate the need for a grower to submit hard-copy reports to the Coalition. Such electronic templates will greatly reduce the need to enter the same information multiple times for each template and will greatly reduce the time and cost for growers to update their information. Although there may be many growers who do not have the technical capacity to complete

electronic templates, the agricultural community has a significant infrastructure to assist those growers. As part of the template submittal, or soon thereafter, the Coalition should describe its general plans for providing the necessary technical support for growers to efficiently complete the templates. We would also like to discuss how the Board and other state and local agencies can help provide such support.

Farm Evaluation Template

6. In Part A, the Farm Evaluation template appears to identify all parcels associated with a Member, although Part B appears to be crop specific. The parcels and associated crops will need to be linked. The Nitrogen Management Plan includes a "Field #" data field, yet the Farm Evaluation does not. There should be consistency between the templates.
7. The Farm Evaluation could be used to help educate the grower on whether their parcel is in a high vulnerability area and for what constituents. Board staff recommend including data fields for whether the parcel is associated with a high vulnerability area and for what constituent. We realize the Coalition can provide this analysis, however, the addition of these data fields could raise the grower's awareness of water quality issues related to the area where their operation is located.
8. For the wellhead practices section, it is unclear whether the answers to the questions imply that the practice applies to all wells or just some of the wells. The format of the questionnaire must be changed to clarify whether wellhead protection practices apply to all wells or a subset of the wells. Board staff suggest a table, with well numbers keyed to the Farm Map, that would be used to indicate the wellhead protection practices that apply to each well.
9. In addition to asking whether there are abandoned wells on the property, the template should include questions regarding how those wells were abandoned, if known. If the wells were not properly closed, there is a potential direct discharge pathway to groundwater from the land surface. Board staff suggest a table, with well numbers keyed to the Farm Map, that would be used to indicate the closure method used for each well.
10. The template appropriately includes a question regarding the discharge of sediment. Either in Part A or Part B, the template must also allow the grower to report on their sediment and erosion control practices, if such practices are necessary.
11. In Part B, please clarify why the "represented crop acreage" field is provided, since Part A presumably identifies the parcels and acreage to which the Farm Evaluation applies.
12. Under Irrigation Practices ("Water application scheduled to meet need") and Nitrogen Management Methods ("Minimize leaching") there are similar check boxes that should be expanded. If there are other methods of minimizing leaching besides through optimizing irrigation water management, those methods should be identified. The specific methods for how water application would be scheduled to meet need should be identified.
13. The Farm Map (Part C) will be a valuable tool for the growers to simply convey important information regarding their farm. The Farm Map should also identify the downstream water body that receives the discharge from the farm once it leaves the property. The template instructions indicate that the Farm Map would be kept on-site due to concerns about the locations of wells potentially being made public. The Order currently does not allow the

grower to exclude any portion of the Farm Evaluation it submits to the third-party. The monitoring and reporting program or the waste discharge requirements would have to be modified to meet the stated intent to keep the Farm Map on-site.

Nitrogen Management Plan (NMP) and Summary Report Template

14. The Nitrogen Management Plan provides the basic information for an overall nitrogen budget, however, it does not provide complete information on how the grower will manage their nitrogen applications to protect groundwater and surface water. The Farm Evaluation provides additional information on how nitrogen will be managed, although it is not clear whether the information in the Farm Evaluation will be linked to the farm field identified in the Nitrogen Management Plan. The Nitrogen Management Plan must include practices (in addition to the “budget” information) that will be used to meet board requirements. In addition, the Nitrogen Management Plan is structured in a manner that will require the grower to perform many calculations prior to entering a number in the template. For the electronic version, Board staff recommend that the template be structured so that the grower can enter in the basic data and the appropriate calculations are performed within the template (e.g., the grower enters the nitrate results for their irrigation water and the total water applied and the pounds of nitrogen available from irrigation water is calculated for them).
15. The template includes a place for the grower to identify crop nitrogen “need”. In the template, crop “need” is described as an amount based on need levels developed by commodity groups, the University of California, etc. As we understand the recommendations that will be provided, those “need levels” already account for inefficiency in plant uptake – in other words the recommended amount of nitrogen to apply will assume that some of that nitrogen will not be taken up by the plant. The language in the Order uses the terms “crop need” and “crop consumption” interchangeably, which may be leading to confusion. The template should refer to nitrogen consumption to meet projected yield and not nitrogen “needs”. The appropriate context can be found in the MRP (see page 23, under “Report Component (17) – Summary of Reported Nitrogen Data”) in the description of the nitrogen data that must be reported to the board. The nitrogen consumption ratio must be reported and is the ratio of total nitrogen available for crop uptake to the estimated crop consumption of nitrogen. If the term “need” is going to be used in the template, then it must be clear that it is the amount of nitrogen the crop “needs” to consume to meet a specified yield goal and not the amount of nitrogen that “needs” to be applied to ensure the crop gets the amount of nitrogen it needs to consume.
16. The nitrogen management plan summary report only provides the nitrogen consumption ratio. It is not clear how merely providing the ratio will meet the intent stated in the accompanying narrative “The Coalition uses the ratios to make comparisons of potential nitrogen loss by crops in similar soil conditions under similar practices.” Board staff agrees that intent is consistent with the Order. However, the NMP summary report does not provide the necessary information to meet that intent. The Coalition will have no way of evaluating potential nitrogen losses, since only a ratio is reported – not the total nitrogen available or the estimated crop consumption – which would provide a basis for understanding how much nitrogen is potentially available to be “lost” through leaching to groundwater. In addition, there is important management practice information captured in the NMP that would not be reported to the Coalition. For example, the sources of nitrogen to meet crop need may be an important variable when making comparisons of practices and their effect on nitrogen losses. The Coalition must revise the NMP summary report to ensure the information being

reported to the Coalition will meet the intent of the Order, as well as provide the data that will be needed to design, implement, and interpret the studies associated with the Management Practices Evaluation Program.

Sediment and Erosion Control Plan Template

17. The sediment and erosion control plan template includes a description of many of the practices that are relevant for sediment and erosion control from the irrigated crop land. The Order requires roads and stream crossings to also be evaluated. Practices associated with minimizing erosion and the discharge of sediment from roads and stream crossings should also be included.
18. The template should help growers identify what locations may be subject to erosion or sediment discharge by providing a list of suggested areas to be evaluated.
19. The template should include a table for the grower to fill out or some other method to associate the identified location or area subject to erosion/sediment discharge; the existing management practices being used, if any; the management practices that are planned for implementation, if applicable; and the timeline for implementation. With the current format proposed, it will be difficult to associate the practices identified in the plan with specific locations on the farm.